



FORM PTO-1449 and B (modified PTO/SB/08)

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

APPLICATION NO.: 09/821832

ATTY. DOCKET NO.: W0571.70010US02

FILING DATE: March 30, 2001

CONFIRMATION NO.: 6240

APPLICANT: Tuschl et al.

GROUP ART UNIT: 1635

EXAMINER: Louis V. Wollenberger

Sheet 1 of 5

**U.S. PATENT DOCUMENTS**

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
		US-20040053876	A1	Turner et al.	03-18-2004
		US-4469863-B1	B1	Ts'o et al.	09-04-1984
		US-20030153521	A1	McSwiggen	08-14-2003
		US-20040001811-		Kreutzer et al.	01-01-2004
		US-20040002153	A1	Monia et al.	01-01-2004
		US-20040005593	A1	Lorens	01-08-2004
		US-20040006035	A1	Macejak et al.	01-08-2004
		US-20040019001-		McSwiggen	01-29-2004
		US-20040072779-		Kreutzer et al.	04-51-2004
		US-20040096843	A1	Rossi et al.	05-20-2004
		US-20040102408-		Kreutzer et al.	05-27-2004
		US-20040121348-		Kreutzer et al.	06-24-2004
		US-20040126791-		Wajant et al.	07-01-2004
		US-20040175703		Kreutzer et al.	09-09-2004
		US-20040192626-		McSwiggen et al.	09-30-2004
		US-20040191905-		Stevenson et al.	09-30-2004
		US-20040241854	A1	Davidson et al.	12-02-2004
		US-20040137471-		Vickers et al.	07-15-2004
		US-20040203145	A1	Zamore et al.	10-14-2004
		US-20040214330-		Waterhouse et al.	10-28-2004
		US-20040224328	A1	Prydz et al.	11-11-2004
		US-20040248835-		Krebs et al.	12-9-2004
		US-20040248296	A1	Beresford et al.	12-09-2004
		US-20040231016-		Wang et al.	11-18-2004
		US-20040175703-		Kreutzer et al.	09-09-2004

**FOREIGN PATENT DOCUMENTS**

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
		WO	97/11170	A1	Worcester Foundation...	03-27-1997	
		WO	98/53083	A1	Zeneca Limited	11-26-1998	
		DE	10155280.7		Ribopharma AG et al.	10-26-2001	
		DE	10158411.3		Ribopharma AG et al.	11-29-2001	
		DE	10160151.4		Ribopharma AG et al.	12-07-2001	
		DE	10235620.3		Ribopharma AG	08-02-2002	
		CA	2432350	A1	Ribopharma AG	07-18-2002	
		CA	2432341	A1	Ribopharma AG	07-18-2002	

FORM PTO-1449/A and B (modified PTO/SB/08)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				APPLICATION NO.: 09/821832		ATTY. DOCKET NO.: W0571.70010US02	
				FILING DATE: March 30, 2001		CONFIRMATION NO.: 6240	
				APPLICANT: Tuschl et al.			
				GROUP ART UNIT: 1635		EXAMINER: Louis V. Wollenberger	
Sheet	2	of	5				

#### FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
		WO	02/055692	A2	Ribopharma AG et al.	07-18-2002	
		WO	02/055693	A2	Ribopharma AG et al.	07-18-2002	
		WO	03/064621	A2	Ambion, Inc.	08-07-2003	
		WO	04/065613	A2	Max-Planck-Gesellscha...	08-05-2004	
		WO	03/106630	A2	Ambion, Inc.	12-24-2003	
		WO	03/106631	A2	Ambion, Inc.	12-24-2003	
		WO	03/035869	A1	Ribopharma AG et al.	05-01-2003	
		DE	10160151	A1	Ribopharma AG	06-26-2003	
		WO	04/045543	A2	Dharmacon, Inc.	06-03-2004	
		WO	04/007718	A2	Max-Planck-Gesellsch...	01-22-2004	
		WO	04/014933	A1	University of Massac...	02-19-2004	
		WO	04/063375	A1	Onsagers AS	07-29-2004	
		WO	04/044131	A2	Isis Pharmaceuticals...	05-27-2004	
		WO	04/046324	A2	University of Massac...	06-03-2004	
		WO	04/042029	A2	Isis Pharmaceuticals...	05-21-2004	
		WO	04/029212	A2	University of Massac...	04-08-2004	
		WO	04/027030	A2	Isis Pharmaceuticals...	04-01-2004	
		WO	04/065600	A2	Max-Planck-Gesellscha...	08-05-2004	
		WO	04/111191	A2	University of Massac...	12-23-2004	
		WO	04/076622	A2	National Institute o...	09-10-2004	
		WO	03/103600	A2	Invitrogen Corporation	12-18-2003	

#### OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		Agrawal, Neema et al., "RNA Interference: Biology, Mechanism, and Applications," Microbiology and Molecular Biology Reviews, Vol. 67(4):657-685 (2003)	
		Ambros, Victor, "microRNAs: Tiny Regulators with Great Potential," Cell, Vol. 107:823-826 (2001)	
		Bass, Brenda L., "The short answer," Nature, Vol. 411:428-429 (2001)	
		Bernstein, Emily et al., "The rest is silence," RNA, Vol. 7:1509-1521 (2001)	
		Biotech Journal, "Small interfering RNAs," retrieved online at www.biotechjournal.com (2002)	
		Boutla, Alexandra et al., "Developmental defects by antisense-mediated inactivation of micro-RNAs 2 and 13 in Drosophila and the identification of putative target genes," Nucleic Acids Research, Vol. 31(17):4973-4980 (2003)	
		Boutla, Alexandra et al., "Short 5'-phosphorylated double-stranded RNAs induce RNA interference in Drosophila," Current Biology, Vol. 11:1776-1780 (2001)	
		Branch, Andrea D., "A good antisense molecule is hard to find," TIBS, Vol. 23:45-50 (1998)	
		Brantl, Sabine, "Antisense-RNA regulation and RNA interference," Biochimica et Biophysica Acta, Vol. 1575:15-25 (2002)	
		Celotto, Alicia M. et al., "Exon-specific RNAi: A tool for dissecting the functional relevance of alternative splicing," RNA, Vol. 8:718-724 (2002)	
		Chi, Jen-Tsan et al., "Genomewide view of gene silencing by small interfering RNAs," PNAS, Vol. 100(11):6343-6346 (2003)	

All references considered except where lined through /LW/

<b>FORM PTO-1449/A and B (modified PTO/SB/08)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				APPLICATION NO.: 09/821832	ATTY. DOCKET NO.: W0571.70010US02
				FILING DATE: March 30, 2001	CONFIRMATION NO.: 6240
				APPLICANT: Tuschl et al.	
				GROUP ART UNIT: 1635	EXAMINER: Louis V. Wollenberger
Sheet	3	of	5		

**OTHER ART — NON PATENT LITERATURE DOCUMENTS**

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		Chiu, Ya-Lin et al, "RNAi in Human Cells: Basic Structural and Functional Features of Small Interfering RNA," Molecular Cell, Vol. 10:549-561 (2002)	
		Conte, Darryl Jr. et al., "RAN Interference in Caenorhabditis elegans," Current Protocols in Molecular Biology, Unit 26.3, Supplement 62, pages 26.3.1-26.3.20 (2003)	
		Cullen, Bryan R., "Derivation and function of small interfering RNAs and microRNAs," Virus Research, Vol. 102:3-9 (2004)	
		Cullen, Bryan R., "RNA interference: antiviral defense and genetic tool," Nature Immunology, Vol. 3(7):597-599 (2002)	
		DePalma, Angelo et al., "Making Sense of RNA Interference Methods," retrieved online <a href="http://www.adepalma.com/genomics/0303/Genomics%20and%20Proteomics%20-%20Making%20Sense%20of%20RNA%20Interference%20Methods.htm">http://www.adepalma.com/genomics/0303/Genomics%20and%20Proteomics%20-%20Making%20Sense%20of%20RNA%20Interference%20Methods.htm</a> (2003)	
		Doench, John G. et al, "siRNAs can function as miRNAs," Genes & Development, Vol. 17:438-442 (2003)	
		Doi, Noboru et al., "Short-Interfering-RNA-Mediated Gene Silencing in Mammalian Cells Requires Dicer and dIF2C Translation Initiation Factors," Current Biology, Vol. 13:41-46 (2003)	
		Donzé, Olivier et al, "RNA interference in mammalian cells using siRNAs synthesized with T7 RNA polymerase," Nucleic Acids Research, Vol. 30(10):1-4 (2002)	
		Dostie, Josée et al, "Numerous microRNPs in neuronal cells containing novel microRNAs," RNA, Vol. 9:180-186 (2003)	
		Essner, Jeffrey J. et al, "Conserved function for embryonic nodal cilia," Nature, Vol. 418:37-38 (2002)	
		Garber, Ken, "Prescription RNA," Technology Review, retrieved online at: <a href="http://www.technologyreview.com/BioTech/wtr_13020259.p1.html">http://www.technologyreview.com/BioTech/wtr_13020259.p1.html</a> (2002)	
		Gitlin, Leonid et al., "Short interfering RNA confers intracellular antiviral immunity in human cells," Nature, Vol. 418:430-434 (2002)	
		Grishok et al., "VI. RNAi and Development References," pgs. 340-360	
		Grishok, Alla et al, "RNAi (Nematode: Caenorhabditis elegans)," Advances in Genetics, Vol. 46:339-360 (2002)	
		Grishok et al., "Target dependent accumulation of small RNAs during RNAi in C. elegans," retrieved online at <a href="http://www.wormbase.org/db/misc/paper?name=%5Bwm2001p307%5D;class=Paper">http://www.wormbase.org/db/misc/paper?name=%5Bwm2001p307%5D;class=Paper</a> , (2001)	
		Grzelinski, Marius et al., "RNA Interference-Mediated Gene Silencing of Pleiotrophin Through Polyethylenimine-Complexed Small Interfering RNAs In Vivo Exerts Antitumoral Effects in Glioblastoma Xenografts," Human Gene Therapy, Vol. 17:751-766 (2006)	
		Guo, Su et al., "par-1, a Gene Required for Establishing Polarity in C. elegans Embryos, Encodes a Putative Ser/Thr Kinase That Is Asymmetrically Distributed," Cell, Vol. 81:611-620 (1995)	
		Haley, Benjamin et al., "In vitro analysis of RNA interference in Drosophila melanogaster," Methods, Vol. 30:330-336 (2003)	
		Hamada, Makiko et al., "Effects of RNA Interference in Gene Expression (RNAi) in Cultured Mammalian Cells of Mismatches and the Introduction of Chemical Modifications at the 3'-Ends of siRNAs," Antisense and Nucleic Acid and Drug Development, Vol. 12:301-309 (2002)	
		Hamilton, Andrew et al., "Two classes of short interfering RNA in RNA silencing," The EMBO Journal, Vol. 21(17):4671-4679 (2002)	
		Hannon, Gregory J., "RNA interference," Nature, Vol. 418:244-251 (2002)	
		Hohjoh, Hirohiko, "RNA interference (RNAi) induction with various types of synthetic oligonucleotide duplexes in cultured human cells," FEBS Letters, Vol. 521:195-199 (2002)	
		Holen, Torgeir et al., "Positional effects of short interfering RNAs targeting the human coagulation trigger Tissue Factor," Nucleic Acids Research, Vol. 30(8):1757-1766 (2002)	
		Holen, Torgeir et al., "Similar behaviour of single-strand and double-strand siRNAs suggests they act through a common RNAi pathway," Nucleic Acids Research, Vol. 31(9):2401-2407 (2003)	
		Hough, Shelley R. et al., "Why RNAi makes sense," Nature Biotechnology, Vol. 21(7):731-732 (2003)	
		Hu-Lieskovan, Siwen et al., "Sequence-Specific Knockdown of EWS-FLI1 by Targeted, Nonviral Delivery of Small Interfering RNA Inhibits Tumor Growth in a Murine Model of Metastatic Ewing's Sarcoma," Cancer Research, Vol. 65(19):8984-8992 (2005)	
		Hutvagner, György et al, "A Cellular Function for the RNA-Interference Enzyme Dicer in the Maturation of the let-7 Small Temporal RNA," Science, Vol. 293:834-838 (2001)	

All references considered except where lined through /LW/

FORM PTO-1449/A and B (modified PTO/SB/08)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				APPLICATION NO.: 09/821832		ATTY. DOCKET NO.: W0571.70010US02	
				FILING DATE: March 30, 2001		CONFIRMATION NO.: 6240	
				APPLICANT: Tuschl et al.			
				GROUP ART UNIT: 1635		EXAMINER: Louis V. Wollenberger	
Sheet	4	of	5				

**OTHER ART — NON PATENT LITERATURE DOCUMENTS**

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		Jackson, Aimee L. et al., "Expression profiling reveals off-target gene regulation by RNAi," Nature Biotechnology, Vol. 21:635-637 (2003)	
		Khvorova, Anastasia et al., "Functional siRNAs and miRNAs Exhibit Strand Bias," Cell, Vol. 115:209-216 (2003)	
		Klahre, Ulrich et al., "High molecular weight RNAs and small interfering RNAs induce systemic posttranscriptional gene silencing in plants," PNAS, Vol. 99(18):11981-11986 (2002)	
		Knight, Scott W. et al., "A Role for the RNase III Enzyme DCR-1 in RNA Interference and Germ Line Development in Caenorhabditis elegans," Science, Vol. 293:2269-2271 (2001)	
		Lee, Rosalind C. et al., "An Extensive Class of Small RNAs in Caenorhabditis elegans," Science, Vol. 294:862-864 (2001)	
		Lewis, David L. et al., "Efficient delivery of siRNA for inhibition of gene expression in postnatal mice," Nature Genetics, Vol. 32:107-108 (2002)	
		Li, Bao-jian et al., "Using siRNA in prophylactic and therapeutic regimens against SARS coronavirus in Rhesus macaque," Nature Medicine, Vol. 11(9):944-951 (2005)	
		Lima, Walt F. et al., "Human RNase H1 Uses NOe Tryptophan and Two Lysines to Position the Enzyme at the 3'-DNA/5'-RNA Terminus of the Heteroduplex Substrate," The Journal of Biological Chemistry, Vol. 278(50):49860-49867 (2003)	
		Majlessi, Mahrdad et al., "Advantages of 2'-O-methyl oligoribonucleotide probes for detecting RNA targets," Nucleic Acids Research, Vol. 26(9):2224-2229 (1998)	
		Martinez, Javier et al., "Single-Stranded Antisense siRNAs Guide Target RNA Cleavage in RNAi," Cell, Vol. 110:563-574 (2002)	
		Martinez, Luis Alfonso et al., "Synthetic small inhibiting RNAs: Efficient tools to inactivate oncogenic mutations and restore p53 pathways," PNAS, Vol. 99(23):14849-14854 (2002)	
		McManus, Michael T. et al., "Small Interfering RNA-Mediated Gene Silencing in T Lymphocytes," The Journal of Immunology, Vol. 169:5754-5760 (2002)	
		Miyagishi, Makoto et al., "U6 promoter-drive siRNAs with four uridine 3' overhangs efficiently suppress targeted gene expression in mammalian cells," Nature Biotechnology, Vol. 19:497-500 (2002)	
		Molenaar, C. et al., "Linear 2'-O-Methyl RNA probes for the visualization of RNA in living cells," Nucleic Acids Research, Vol. 29(17):1-9 (2001)	
		Monia, Brett P. et al., "Sequence-specific antitumor activity of a phosphorothioate oligodeoxyribonucleotide targeted to human C-raf kinase supports an antisense mechanism of action in vivo," Proc. Natl. Acad. Sci. USA, Vol. 93:15481-15484 (1996)	
		Mourelatos, Zissimos et al., "miRNPs: a novel class of ribonucleoproteins containing numerous microRNAs," Genes & Development, Vol. 16:720-728 (2002)	
		Myers, Jason W. et al., "Recombinant Dicer efficiently converts large dsRNAs into siRNAs suitable for gene silencing," Nature Biotechnology, Vol. 21:324-328 (2003)	
		Nishikura, Kazuko, "A Short Primer on RNAi: RNA-Directed RNA Polymerase Acts as a Key Catalyst," Cell, Vol. 107:415-418 (2001)	
		Paddison, Patrick J. et al., "Stable suppression of gene expression by RNAi in mammalian cells," PNAS, Vol. 99(3):1443-1448 (2002)	
		Persengiev, Stephen P. et al., "Nonspecific, concentration-dependent stimulation and repression of mammalian gene expression by small interfering RNAs (siRNAs)," RNA, Vol. 10:12-18 (2004)	
		Reich, Samuel J. et al., "Small interfering RNA (siRNA) targeting VEGF effectively inhibits ocular neovascularization in a mouse model," Molecular Vision, Vol. 9:210-216 (2003)	
		Ruvkun, Gary, "Glimpses of a Tiny RNA World," Science, Vol. 294:797-799 (2001)	
		Schmitz, John C. et al., "Effect of 2'-O-methyl antisense ORNs on expression of thymidylate synthase in human colon cancer RKO cells," Nucleic Acids Research, Vol. 29(2):415-422 (2001)	
		Schwarz, Dianne S. et al., "Evidence that siRNAs Function as Guides, Not Primers, in the Drosophila and Human RNAi Pathways," Molecular Cell, Vol. 10:537-548 (2002)	
		Schwarz, Dianne S. et al., "Asymmetry in the Assembly of the RNAi Enzyme Complex," Cell, Vol. 115:199-208 (2003)	
		Shi, Yang, "Mammalian RNAi for the masses," Trends in Genetics, Vol. 19(1):9-12 (2003)	
		Skyba, Danny M. et al., "Direct In Vivo Visualization of Intravascular Destruction of Microbubbles by Ultrasound and its Local Effects on Tissue," Circulation, Vol. 98:290-293 (1998)	
		Song, Erwei et al., "RNA interference targeting Fas protects mice from fulminant hepatitis," Nature Medicine, Vol. 9(3):347-351 (2003)	
		Soutschek, Jürgen et al., "Therapeutic silencing of an endogenous gene by systemic administration of modified siRNAs," Nature, Vol. 432:173-178 (2004)	

All references considered except where lined through /LW/

<b>FORM PTO-1449/A and B (modified PTO/SB/08)</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				APPLICATION NO.: 09/821832	ATTY. DOCKET NO.: W0571.70010US02
				FILING DATE: March 30, 2001	CONFIRMATION NO.: 6240
				APPLICANT: Tuschl et al.	
				GROUP ART UNIT: 1635	EXAMINER: Louis V. Wollenberger
Sheet	5	of	5		

**OTHER ART — NON PATENT LITERATURE DOCUMENTS**

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		Steinberg, Douglas, "MicroRNA Shows Macro Potential," The Scientist, Vol. 17(12):1-9 (2003)	
		Stipp, David, "Biotech's Billion Dollar Breakthrough," Fortune, Vol. 147(10):96-100 (2003)	
		Svoboda, Petr et al., "Selective reduction of dormant material mRNAs in mouse oocytes by RNA interference," Development, Vol. 127:4147-4156 (2000)	
		Szweykowska-Kulińska, Zofia et al., "RNA interference and its role in the regulation of eucaryotic gene expression," Acta Biochimica Polonica, Vol. 50(1):217-229 (2003)	
		Tabara, Hiroaki et al., "The dsRNA Binding Protein RDE-4 Interacts with RDE-1, DCR-1, and a DEXH-Box Helicase to Direct RNAi in C. elegans," Cell, Vol. 109:861-871 (2002)	
		Tan, P. H. et al., "Gene knockdown with intrathecal siRNA of NMDA receptor NR2B subunit reduces formalin-induced nociception in the rat," Gene Therapy, Vol. 12:59-66 (2005)	
		Tang, Guiliang et al., "A biochemical framework for RNA silencing in plants," Genes & Development, Vol. 17:49-63 (2003)	
		Thakker, Deepak R. et al., "Neurochemical and behavioral consequences of widespread gene knockdown in the adult mouse brain by using nonviral interference," PNAS, Vol. 101(49):17270-17275 (2004)	
		Tijsterman, Marcel et al., "RNA Helicase MUT-14-Dependent Gene Silencing Triggered in C. elegans by Short Antisense RNAs," Science, Vol. 295:694-697 (2002)	
		Tijsterman, Marcel et al., "PPW-1, a PAZ/PIWI Protein Required for Efficient Germline RNAi, Is Defective in a Natural Isolate of C. elegans," Current Biology, Vol. 12:1535-1540 (2002)	
		Tuschl, Thomas, "Expanding small RNA interference," Nature Biotechnology, Vol. 20:446-448 (2002)	
		Vickers, Timothy A. et al., "Efficient Reduction of Target RNAs by Small Interfering RNA and RNase H-dependent Antisense Agents," The Journal of Biological Chemistry, Vol. 278(9):7108-7118 (2003)	
		Wall, Nathan R. et al., "Small RNA: can RNA interference be exploited for therapy?" The Lancet, Vol. 362:1401-1403 (2003)	
		Wess, Ludger et al., "Managing Complexity: Early Days for RNAi," Compugen, retrieved online at <a href="http://www.cgen.com/news/articles/article031703.html">http://www.cgen.com/news/articles/article031703.html</a> (2003)	
		Xia, Haibin et al., "siRNA-mediated gene silencing in vitro and in vivo," Nature Biotechnology, Vol. 20:1006-1010 (2002)	
		Yang, Dun et al., "Short RNA duplexes produced by hydrolysis with Escherichia coli RNase III mediate effective RNA interference in mammalian cells," PNAS, Vol. 99(15):9942-9947 (2002)	
		Zamore, Phillip D. et al., "siRNAs knock down hepatitis," Nature Medicine, Vol. 9(3):266-267 (2003)	
		Zeng, Yan et al., "Both Natural and Designed Micro RNAs Can Inhibit the Expression of Cognate mRNAs When Expressed in Human Cells," Molecular Cell, Vol. 9:1327-1333 (2002)	
		Zhang, Haidi et al., "Human Dicer preferentially cleaves dsRNAs at their termini without a requirement for ATP," The EMBO Journal, Vol. 21(21):5875-5885 (2002)	
		Zhang, Yingjie et al., "Engineering Mucosal RNA Interference in Vivo," Molecular Therapy, Vol. 14(3):336-342 (2006)	
		Zimmermann, Tracy S. et al., "RNAi-mediated gene silencing in non-human primates," Nature, Vol. 441:111-114 (2006)	

EXAMINER: <u>/Louis Wollenberger/</u>	DATE CONSIDERED: <u>2/28/2009</u>
---------------------------------------	-----------------------------------

# EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

\*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. \_\_, filed \_\_, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]

All references considered except where lined through /LW/